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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,452	12/14/2001	Ralph A. Mosher	D/A1286	1083

7590 07/18/2005

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EXAMINER	
RHEE, JANE J	

ART UNIT	PAPER NUMBER
1745	

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/014,452	MOSHER ET AL.	
	Examiner	Art Unit	
	Jane Rhee	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 25 May 2005.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1,4,6,8-11,13-18 and 21-25 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1,4,6,8-11,13-18,21-25 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Rejections Repeated

1. The 35 U.S.C. 103(a) rejection of claims 1,4,6-12,14-16,18,21,22-25 over Parker et al. in view of Arnold et al. (4663371) and in further view of Schlueter Jr. et al. (5942301) has been repeated as previously made in office action 4/18/2005.

2. The 35 U.S.C. 103(a) rejection of claim 13 over Parker et al., Arnold et al. and Schlueter Jr. et al. in view of Yamasaki (5863626) has been repeated as previously made in office action 4/18/2005.

3. The 35 U.S.C. 103(a) rejection of claim 17 over Parker et al., Arnold et al. and Schlueter et al. in view of Pistoia (6322927) has been repeated as previously made in office action 4/18/2005.

Response to Arguments

4. Applicant's arguments filed 5/25/2005 have been fully considered but they are not persuasive.

In response to applicant's argument that Parker et al. does not teach or suggest the adhesive comprising an oxalic acid or plasticizer as claimed, Arnold et al. teaches that the adhesive comprises polyamide (col.1 line 52), oxalic acid (col. 3 line 24), a plasticizer, bisphenol of 5%wt(col. 1 line 52) and wherein the adhesive is crosslinked (col. 3 line 41) for the purpose of to increase the adhesion of the polyamide (col. 3 lines 59-61).

In response to applicant's argument that Arnold et al. fail to disclose the use of an electrically conductive filler in the polyamide adhesive, Schlueter Jr. et al. discloses

that the adhesive further comprises electrically conductive fillers (col. 6 lines 50) and that the conductive filler is selected from the group consisting of carbon fillers, metal oxide fillers, polymer fillers, charge transporting molecules and mixtures thereof (col. 9 lines 6-17) wherein the carbon filler is selected from the group consisting of carbon black, graphite, fluorinate carbon, and mixtures thereof (col. 9 lines 10-11) and wherein the electrically conductive filler that is a metal oxide filler selected from the group consisting of titanium dioxide, tin oxide, indium tin oxide, iron oxide aluminum oxide, and mixtures thereof (col. 9 lines 5-10) for the purpose of exhibiting high mechanical strength providing heat-conducting properties this in turn improves the thermal efficiency of a fusing system employing the belt and possessing tailored electrical properties (col. 5 lines 3-6).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Arnold et al. teaches the use of a polyamide adhesive in combination with a thermoplastic material and Parker et al. also teaches the use of a polyamide adhesive in combination with a thermoplastic material. Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Parker et al. with the

adhesive that comprises polyamide, oxalic acid, a plasticizer, bisphenol of 5%wt, and wherein the adhesive is crosslinked in order to increase the adhesion of the polyamide (col. 3 lines 59-61) as taught by Arnold et al.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Schlueter Jr. teaches a thermoplastic substrate filled with a conductive filler and Parker et al. and Arnold et al. teaches the use of a polyamide adhesive in combination with a thermoplastic material. Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide, Parker et al. with the adhesive further comprises electrically conductive fillers wherein the conductive filler is selected from the group consisting of carbon fillers, metal oxide fillers, polymer fillers, charge transporting molecules and mixtures thereof, wherein the carbon filler is selected from the group consisting of carbon black, graphite, fluorinate carbon, and mixtures thereof and wherein the electrically conductive filler that is a metal oxide filler selected from the group consisting of titanium dioxide, tin oxide, indium tin oxide, iron oxide aluminum oxide, and mixtures thereof in order to exhibit high mechanical strength providing heat conducting properties this in turn improves the thermal efficiency of a

fusing system employing the belt and possessing tailored electrical properties (col. 5 lines 3-6) as taught by Schlueter Jr. et al.

In response to applicant's argument that there is no motivation to combine Yamaski et al. with Schlueter Jr. et al. and the adhesives of Parker et al. and Arnold et al., Schlueter Jr. teaches a thermoplastic substrate filled with a conductive filler selected from the group consisting of carbon fillers, metal oxide fillers, polymer fillers, charge transporting molecules and mixtures thereof, wherein the carbon filler is selected from the group consisting of carbon black, graphite, fluorinate carbon, and mixtures thereof and wherein the electrically conductive filler that is a metal oxide filler selected from the group consisting of titanium dioxide, tin oxide, indium tin oxide, iron oxide aluminum oxide, and mixtures thereof in order to exhibit high mechanical strength providing heat conducting properties this in turn improves the thermal efficiency of a fusing system employing the belt and possessing tailored electrical properties (col. 5 lines 3-6) and Yamaski et al. teaches that the electrically conductive filler is a quaternary ammonium salt for the purpose of creating an electrically conductive substrate (col. 1 lines 24-25). Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Parker et al. with the electrically conductive filler is a quaternary ammonium salt in order to create an electrically conductive substrate (col. 1 lines 24-25) as taught by Yamaski.

In response to applicant's argument that Pistola is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was

concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Pistola teaches that its notorisously well known in the art that conductive fillers comprise an electrically conductive polymer such as a polyprrole or polyacetylene, therefore, since Schlueter Jr. et al. teaches electrically conductive fillers in thermoplastic adhesive, it would have been obvious to one having ordinary skill in the art to provide a notoriously well known conductive filler, polyprrole to the adhesive in absence of unexpected results.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jane Rhee whose telephone number is 571-272-1499. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jane Rhee
July 11,2005

PATRICK JOSEPH RYAN
SUPERVISORY PATENT EXAMINER